

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An apparatus comprising:

at least one processor;

a memory coupled to the at least one processor, wherein the memory stores non-object oriented data; and

a-mapping software residing in memory, wherein the at least one processor executes the mapping software to map an object onto the ~~non-objected~~ non-object oriented data located in the memory using zero size object mapping, wherein the zero size object mapping without requiring any substantial does not require memory in addition to a portion of the memory storing the non-object oriented data.

Claim 2 (canceled).

Claim 3 (currently amended): The apparatus of claim 1, ~~wherein the non-object oriented data is stored within a legacy data structure~~ wherein the object oriented data inherits the non-object oriented data.

Claim 4 (currently amended): A method for retrieving non-object oriented data from within an object oriented model, the method comprising the steps of:

loading memory with non-object oriented data;

mapping an object oriented model onto a memory space occupied by the non-object oriented data without requiring ~~substantial~~ additional memory space; and

retrieving a non-object oriented data element from the memory in the object oriented model based on the mapping.

Claim 5 (currently amended): The method of claim 4, wherein the step of mapping further comprising:

inheriting the non-object oriented data from memory.

Claim 6 (currently amended): The method of claim 5 wherein the step of mapping further comprising:

~~creating~~ deriving a class from the non-object oriented data.

Claim 7 (currently amended): The method of claim 6, wherein the step of mapping further comprising:

instantiating an instance of the class based on static casting.

Claim 8 (canceled).

Claim 9 (currently amended): The method of claim 4, wherein the step of mapping further comprising:

accessing the non-object oriented data using ~~a~~an object oriented model.

Claim 10 (currently amended): The method of claim 4, wherein the step of retrieving occurs with zero size memory.

Claim 11 (currently amended): The method of claim 4, wherein object oriented data inherits the non-object oriented data ~~the non-object oriented data are stored within a legacy data structure~~.

Claims 12-19 (canceled)

Claim 20 (new): A method for providing a bi-directional access between non-object oriented data and object oriented data comprising:

mapping object oriented data onto non-object oriented data stored in memory using zero size mapping, wherein mapping comprising:

static casting a non-object oriented data element from the non-object oriented data with an object oriented data element.

Claim 21 (new): The method of claim 20, further comprising:

retrieving the non-object oriented data element in a response to a request for the object oriented data element.

Claim 22 (new): The method of claim 20, wherein all of the non-object oriented data stored in the memory is mapped with corresponding object oriented data elements when the non-object oriented data is compiled.

Claim 23 (new): The method of claim 20, wherein the non-object oriented data and the object oriented data is associated with very large scale integrated circuits.